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GIE Position Paper on the Energy Roadmap for 2050 to be prepared by the European Commission

Introduction

The Commission will submit a Communication on the development of an "Energy Roadmap for 2050" to the Council and the European Parliament later this year. This roadmap will contain a vision for an efficient, secure and sustainable energy system in 2050. GIE appreciates the possibility to contribute to the public consultation in order to make the European Commission aware of the importance of natural gas infrastructure in the envisaged "Roadmap to 2050" as well as of the contribution of infrastructure operators to the reduction of greenhouse gases emissions.

Who is GIE?

Gas Infrastructure Europe (GIE) is an association representing the sole interest of the infrastructure industry in the natural gas business such as Transmission System Operators, Storage System Operators and LNG Terminal Operators. GIE has currently 66 members in 26 European countries.

One of the objectives of GIE is to voice the views of its members vis-à-vis the European Commission, the regulators and other stakeholders. Its mission is to actively contribute to the construction of a single, sustainable and competitive gas market in Europe underpinned by a stable and predictable regulatory framework as well as by a sound investment climate.

GIE position on the Roadmap towards 2050

Gas infrastructure is the market facilitator and therefore the backbone of a more interconnected, liquid, competitive, sustainable and secure EU gas market. GIE is committed to contributing to a sustainable, competitive and secure EU gas market. This includes reducing CO_2 emissions on an equitable way across the EU. GIE support the conclusion of the 6th Fossil Fuels Forum that "a low-carbon economy does not have to mean a low-fossil fuel economy"[1]. "Decarbonisation is a requirement on the energy produced and does not contradict a continued use of fossil fuels"[1]. Therefore a low carbon economy does not mean the end of fossil fuels within the EU energy mix; rather, new ways need to be found to continue the use of fossil fuels but with greater efficiency and lower CO_2 emissions.

Natural gas is the cleanest, most efficient and versatile fossil fuel, making it a unique choice in the path towards a lower carbon energy mix and sustainable future. More importantly, the abundance of natural gas, its competitive cost of supply, its immediate availability and the flexibility to enable renewable energy clearly favours it as the best source to reach emission reduction targets at the lowest cost.

[1] European Commission conclusions for the 6th European Fossil Fuels Forum [ener.ddg1.b.3/JP/sc A(2010)802203]

The broad scale of already available high efficient technologies for gas needs to be highlighted. For instance, cogeneration or combined heat-and-power (CHP) has efficiency higher than 80%. Gas technologies are not only a solution for the big industrial customers but also for SMEs and householders consumers.

CCS

CO_2 Capture and Storage is one option in the portfolio of measures to reduce greenhouses gases. CCS, in parallel with energy efficiency improvements or development of renewable energies, contributes to CO_2 reduction, and thus to meet the EU climate targets. The European Commission considers CCS as a key element of its energy strategy and « believes that after 2020 all new power plants using coal, and most likely gas as well, should be built and operated with CCS, whereas capture-ready plants built in the previous period (before 2020) should be "retrofitted" »[2]. This vision provides the advantage of a very strong support to European CCS projects in the years to come.

Indeed, the availability of CCS at competitive cost would allow developing economically competitive «clean gas». Moreover, as CO_2 formed by gas combustion is only half the CO_2 formed by coal combustion, the need of CCS is divided by two when using gas rather than coal. In our opinion, «clean gas» would represent, without doubts, the cleanest fossil fuel option in the market. We have to consider that fossil fuels will remain necessary for several decades and consequently CCS has a strong transitional role to play. CCS will be vital to sustain worldwide economic growth whilst mitigating the harmful effects of CO_2 emissions. As the International Energy Agency concluded, without CCS, the cost of achieving a 50% reduction in CO_2 emissions by 2050 will increase by 70%.[3]

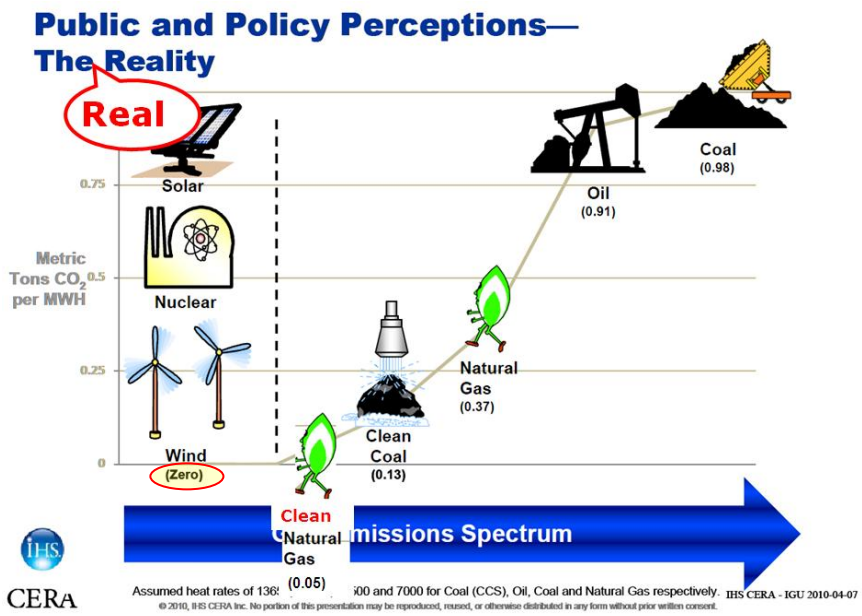
CO_2 Storage

Considering the storage part of the new business CCS to come, Storage Operators can take advantage of their existing competencies to build a new business line which is close to their current activity.

However, it is worthwhile to consider that many problems, difficulties and threats have to be resolved when developing CCS activities: public acceptance, funding, CO_2 prices and a risk of over-regulation hindering the natural development of this technology are factors which should be carefully taken into account.

[2] Pg 10, Sustainable power generation from fossil fuels: aiming for near-zero emissions from coal after 2020 (COM 2006)843

[3] From 2005 levels, IEA CCS Roadmap 2009



Natural gas as a destination fuel

As it can be seen in the above graph, clean gas is the fossil fuel with the lowest CO_2 emissions. Moreover, natural gas is providing the flexibility required to back-up the increasing amount of renewables. If we consider these two advantages (low emissions and flexibility) and taking into account that gas is abundantly available, affordable and acceptable definitely, natural gas not only must be considered as a transition fuel, but also as a destination fuel post 2050. And with biogas, it is also a renewable energy source, with a negative CO_2 footprint. Furthermore, new developing technologies, such as Compressed Air Energy Storage (CAES) or production of synthetic gas ("power to gas") would trigger new ways of using the existing and new infrastructure to provide low carbon energy storage using the know-how of UGS companies.

GIE considers that meeting the EU's very ambitious commitments towards a low-carbon economy by 2050 will require parallel development of energy efficiency measures, the development of renewable energy sources and the deployment of carbon capture and storage (CCS). Most importantly, these developments will have to be accompanied indeed by a significant development of new natural gas infrastructures.

By 2050, natural gas offers the opportunity to be used in conjunction with CCS and new developing technologies to help decarbonise the energy sector and to provide an affordable flexible back-up to the increasing renewables sector.

Investments into gas infrastructure

Over the next decade, significant investment will be needed to ensure a transition to a low carbon economy, mainly in energy infrastructure. In the context of the current economic crisis, this will be challenging, and requires that current low-carbon energy sources and technological solutions will need to take central stage.

Development of the right electricity and gas infrastructures in a timely manner is critical. Gas infrastructures are needed to ensure a liquid, competitive and secure EU gas market. GIE would like to emphasise that gas infrastructures are "market facilitators" which enable the completion of the internal market. A real internal gas market is the key to a more sustainable and efficient market with lower CO_2 emissions.

A sound investment climate together with a stable and predictable regulatory framework providing the appropriate incentives for investment constitute the prerequisite for the development of new gas infrastructure which will trigger further market integration and enhance security of supply. A proper regulatory framework will help to respond to many infrastructure challenges without resorting to extraordinary tools.

GIE would like to reiterate that gas infrastructure investment entails long-lead times and thus requires long-term visibility. Regulatory frameworks should therefore be clear, in-keeping with the longer-term policy perspectives and consistent across borders. This should be recognized as a prevailing principle spanning to all infrastructure projects.

Furthermore gas infrastructure requires capital intense investments which are paid-back over a period of 30-50 years. The European Commission considers on one hand that there is a need for modernizing and developing gas infrastructures, but on the other hand it advocates at the same time scenarios with a decline in gas demand in the medium and long term, considering the role of gas only as a bridge fuel to a low carbon economy[4]. GIE would like to call for a clearer and coherent view and recognition that gas will continue playing a critical role in the EU energy mix for decades from the European Commission in order to ensure a sound investment climate and avoid uncertainty. This uncertainty is damaging to investor's confidence and restricts new investment.

[4] Pg 20-22, Energy infrastructure priorities for 2020 and beyond (COM 2010) 677